



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,002	08/28/2001	Fernando A. Mujica	TI-32858	6209
23494	7590	06/21/2005	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265				PHU, PHUONG M
ART UNIT		PAPER NUMBER		
2631				

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/941,002	MUJICA ET AL.	
	Examiner	Art Unit	
	Phuong Phu	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 09 May 2005.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 11-15, 19, 20 is/are allowed.  
 6) Claim(s) 1-10 and 16-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

This Office Action is responsive to the applicant's response filed on 5/9/05.

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 7-10 and 16-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 7 and 16 recite the limitation "a second clock modifier having an input for receiving said local clock signal and operable to apply a second phase modifier to said local clock signal responsive to said issued correction signal in combination with said first clock modifier applying said first phase modifier". This limitation is not disclosed in the specification.

Claims 8 and 17 recite the limitation "said second clock modifier introduces a greater phase clock jitter to said local clock signal than a clock jitter introduced by said first clock modifier". This limitation is not disclosed in the specification.

Claims, (if any, depended on above claims), are also rejected with the above corresponding reasons.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "said local clock signal" on line 8. It is unclear whether this limitation is referred to "a local clock signal" on line 5 or to "a local clock signal" on line 6.

Claims, (if any, depended on above claim), are also rejected with the above reason.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki (6,353,648).

-Regarding to claim 1, see figures 1 and 2 and col. 4, lines 1-48, Suzuki discloses a system (see figure 1) comprising:

a phase estimator (3, 4) having an input for receiving phase information corresponding to a remote clock signal (EXTERNAL CLOCK) being a data signal and operable to determine a phase error (107) with respect to said remote clock signal and a local clock signal (105), said phase estimator further operable to translate said phase error for timing correction of said local clock signal and issue a corresponding correction signal (107); and

a first clock modifier (7) having an input for receiving said local clock signal and operable to apply a first phase modifier ((11)'s) (see figure 2) responsive to said issued correction signal (107), said first clock modifier further having an output for issuing a synchronized clock signal (DELAY CLOCK SIGNAL).

-Regarding to claim 3, Suzuki discloses that said first clock modifier further includes a delay line having a plurality of delay elements ((10)'s), wherein each delay element introduces a predetermined clock jitter to said local clock signal (see figure 2).

-Regarding to claim 4, in Suzuki, since each of said delay elements are provides an equal delay (because said delay elements are identical delay elements (10)) (see figure 2, and col. 35-47), clock jitters are inherently applied to said local clock signal in an equal distribution over a time duration over which said local clock signal is transmitted from the first delay element (10) to the last delay element (10) of said first clock modifier (7).

-Regarding to claim 5, Suzuki discloses that said delay elements are serially coupled (see figure 2).

*Allowable Subject Matter*

6. Claims 11-15, 19 and 20 are allowed.

7. Claims 2 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

8. Applicant's arguments filed on 5/9/05 have been fully considered but they are not, in part, persuasive.

-The previous objection on Drawings has been withdrawn since the Drawings were amended to overcome the objection.

-Applicant's arguments with respect to the previous rejection, under 35 USC, first paragraph, to claims 7-10 and 16-18, are not persuasive.

The applicant mainly argues that the limitation "a second clock modifier having an input for receiving said local clock signal and operable to apply a second phase modifier to said local clock signal responsive to said issued correction signal in combination with said first clock modifier applying said first phase modifier" is disclosed by second clock modifier (NCO 210).

The examiner respectfully disagrees. If the second clock modifier (NCO 210) is accounted for the "second clock modifier" of the limitation and, as illustrated in figure 3, the second clock modifier NCO 210 having an input for receiving the "local clock signal" (CLKin), then the limitation would conflict with a "first clock modifier" of another limitation "a first clock modifier having an input for receiving said local clock signal and operable to apply a first phase modifier responsive to said issued correction signal, said first clock modifier further having an output for issuing a synchronized clock signal" as recited in claims 1 and 11, wherein, as illustrated in figure 3, the "first clock modifier" is disclosed by elements (210, 310,

350) having an input (an input of NCO 210) for receiving said local clock signal (CLKin) and operable to apply a first phase modifier (310) responsive to said issued correction signal, said first clock modifier further having an output for issuing a synchronized clock signal (CLKout). Namely, as recited claims 1 and 10, the “second clock modifier” NCO 210 is a part of the “first clock modifier”, then it is conflicted with claims 7 and 16 claiming “the apparatus of claim 1, further including a second clock modifier” and “the system of claim 11, further include a second clock modifier”, i.e., claiming that the “second clock modifier” NCO 210 is separate from the “first clock modifier” and receives the same local clock signal (CLKin) as the “first clock modifier”.

-Applicant's arguments with respect to the previous rejection, under 35 USC 102, to claims 1-6 and 11-15 as being anticipated by Kovacs et al are persuasive. The previous rejection has been withdrawn.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuong Phu  
Primary Examiner  
Art Unit 2631

*Phuong Phu*  
Phuong Phu  
06/10/05

**PHUONG PHU**  
**PRIMARY EXAMINER**